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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/682,005	07/06/2001	George Mazereeuw	03DV-9051	1055
23465	7590	12/01/2003	EXAMINER	
JOHN S. BEULICK C/O ARMSTRONG TEASDALE, LLP ONE METROPOLITAN SQUARE SUITE 2600 ST LOUIS, MO 63102-2740			HUYNH, KIM NGOC	
			ART UNIT	PAPER NUMBER
			2182	15
DATE MAILED: 12/01/2003				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/682,005

Applicant(s)

MAZEREEUW, GEORGE

Examiner

Kim Huynh

Art Unit

2182

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-11 and 13-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2, 4-11, 13-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- ☐ Interview Summary (PTO-413) Paper No(s). _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 10-11 and 13-20 are rejected under 35 U.S.C. 112, first paragraph, for being a single means claims because the claims recite a single circuit for performing the various functions without any structure to enable the circuit to perform those functions. The specification does not provide adequate support to reasonably provide the enablement for the single circuit recited in the claim to perform the recited functions (monitor, detect, and isolate).

A single means claim, i.e., where a means recitation does not appear in combination with another recited element of means, is subject to an undue breadth rejection under 35 U.S.C. 112, first paragraph. In re Hyatt, 708 F.2d 712, 714 - 715, 218 USPQ 195, 197 (Fed. Cir. 1983) (A single means claim which covered every conceivable means for achieving the stated purpose was held nonenabling for the scope of the claim because the specification disclosed at most only those means known to the inventor.). When claims depend on a recited property, a fact situation comparable to Hyatt is possible, where the claim covers every conceivable structure (means) for achieving the stated property (result) while the specification discloses at most only those known to the inventor.

Apparatus claim 10-11 and 13-20 recites a single circuit which performs various functions as recited, therefore claims 10-11 and 13-20 fit the definition of single means

claims since the "circuit" as recited cover every conceivable means for achieving the stated functions.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 10-11 and 13-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 10-11 and 13-20 are misdescriptive since claims 10-11 and 13-20 are apparatus claims and yet are written in the process/step format. The claims as recited lack all essential structural elements of "the circuit" for performing the recited functions and therefore it is unclear of the meets and bound the applicant intent to cover by the term "circuit".

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-2, 4-11 and 13-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Allos (US 4,707,760).

Allos disclose a circuit (Fig. 1) hence a method for monitoring a line RMS voltage (please note line voltage/AC mains is supplied with RMS voltage, col. 1, ll. 65-66, and therefore the voltage monitored would be RMS voltage) to detect a high or low RMS voltage, and display L1-4 when an overvoltage and undervoltage event 9, disconnect power from the protected device, and restoring power to the device when the voltage falls within the range (see abstract).

7. Claims 1-2, 4-11 and 13-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Bello (US 4,584,623).

Bellos disclose a circuit hence a method for monitoring a line voltage to detect and isolate the circuit in an overvoltage and undervoltage event (abstract, lines 1-3, claim 1, and col. 2, ll. 9-24), and indicator lamp for indicating the status of the switch/line voltage being monitor when the monitored voltage is above/below the voltage range.

Bello also discloses restoring power to the device when the line voltage is within predetermined range (col. 2, ll. 22-23).

Response to Arguments

8. Applicant's arguments filed 9/24/03 have been fully considered but they are not persuasive.

a. The circuit of Allos monitors the environment of 230V by using the windows of a predetermined voltage range of +/-5 to 15% (col. 3, first paragraph) for either one to five cycles (col. 2, ll. 31-38). Applicant amends the disclosure to add the term "rms" to differentiate from the language "monitoring the peak rated value" used by Allos.

However, please note Allos discloses the transformer T1 provides an approximate 12 V rms output having terminals U, C, and D to provide supply voltage (mains voltage) and reference voltages (regulated voltage) for the voltage regulator (col. 1, ll. 59-67). Therefore, it is inherent that the mains voltage in which being monitor by the voltage regulator is rms voltage.

Regarding the high and low "rms" value, the applicant amendment the claims to add the term "rms" to the high and low values to distinguish from the Allos reference. Please note that the "peak" voltage referred in Allos is no different than the "high and low" rms voltages of applicant, i.e. voltages that are outside of the window range.

b. Applicant argues that Allos does not immediately shut down when the monitored voltage is outside of the window range and Bellos does not disclose immediately restoring power to the load. Please note that the claims do not explicitly require that the power is shut off or restored immediately when the undervoltage/overvoltage and normal conditions are met. Furthermore, the circuit of applicant's Fig. 2 also supports that there are delays prior to shutting down/restoring power to the load due to the intervening elements between the high/low comparators and the power switch.

Conclusion

9. **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

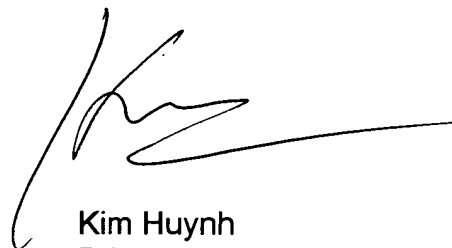
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kim Huynh whose telephone number is (703) 308-1678.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

A handwritten signature in black ink, appearing to be 'Kim Huynh', with a long horizontal stroke extending to the right.

Kim Huynh
Primary Examiner
Art Unit 2182

KH
June 21, 2003